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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,362	04/25/2001	Gunnar Back	3191/01393	6563

7590 10/23/2002

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EXAMINER

WILLIAMS, ERIC M

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,362

Applicant(s)

BACK ET AL.

Examiner

Eric M Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-127 is/are pending in the application.
- 4a) Of the above claim(s) 4-120 and 123-126 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 121, 122 and 127 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08-08-2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This action is in response the paper responding to the election requirement filed 08-08-2002 for serial number 09/842362.

Election/Restrictions

2. Applicant's election with traverse of Figure 9 and 13 in the response filed 08-08-2002 is acknowledged. The traversal is on the ground(s) that the Figures are merely drawn to different designs of the same inventive concept. This is not found persuasive because species are by definition different designs of the same inventive concept.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 4-120, and 123-126 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the response to the election requirement filed.

In the Office Action dated 07-24-2002 the Examiner acknowledged claims 1, 4, 5 and 121 as generic. The applicant requests newly formulated independent claim 27, and claims 3 and 4 also be considered generic and therefore readable on the elected species Fig. 9 and 13.

After reconsideration, the examiner believes claims 4, 5, and 27 are not generic because the claims recite, "a provision for fluid flow between the chambers through the clutch". The examiner interprets "through" as passing entirely through an element such

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as via the bellows in the non-elected species. Therefore only claims 1-3, and 121 are generic.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 121-122, and 127 are rejected under 35 U.S.C. 102(b) as being anticipated by Walth et al. Patent No. 5,738,198.

Walth discloses a hydrokinetic torque converter comprising: a housing (2) rotatable about a predetermined axis a pump rotatable by the housing, a turbine (10) rotatable in the housing about the axis by and relative to the pump means for rotating the housing, an output element (13) rotatable about the axis and receiving torque from the turbine, a fluid-operated bypass clutch (15) arranged to transmit variable torque between the housing and the output element independently of the turbine, the clutch including a first part rotatable with the housing, a second part rotatable with the output element and friction generating means (22a) operable to transmit torque between the parts with and without slip with attendant generation of friction heat during operation with slip (column 1 lines 51-67), first and second plenum chambers containing bodies of hydraulic fluid at variable pressure with the provision for fluid flow (column 3 lines 63-67 and column 4 lines 1-5) between the chambers past the friction generating means, and means for regulating the fluid flow (channel 24) in dependency upon the magnitude of

torque being transmitted by the clutch, torsional vibration damping means (16) operating between the first part and at least one of the second part and turbine and the output element, and a stator (12) provided in the housing intermediate the pump and the turbine.

Walth also discloses method of cooling the hydrokinetic torque converter as recited in claim 1 by establishing at least one path for the flow of fluid between the chambers by way of the clutch, at least in the partly engaged condition of the clutch (column 1); and regulating (Walth provides channels 24 as the regulation step controlling the fluid to dissipate heat upon slippage of the clutch , column 1) the flow of fluid along the at least one path in dependency upon the extent of slip between said driving and driven components, the regulating step including increasing the rate of fluid flow along the at least one path when the clutch operates with slip and reducing the rate of fluid flow when the clutch operates with slip (channel 24), and the regulating step (the fluid in Walth continuously contacts the drive component and the aggregate state inherently changes due to increased temperatures) including continuously contacting at least one of the driving and driven components of the clutch with a confined supply of coolant which changes its aggregate state in response to changes of temperature of the at least one component.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sasse Patent No. 6,047,806 discloses a torque converter with depressions in the clutch for fluid flow. Hiroyanagi Patent No. 5,865,283 discloses a torque converter with porous friction elements. Macdonald Patent No. 3,969,543 discloses a friction element in a torque converter with a shield for minimizing heat transfer to the housing.

Middleman Patent No. 5,779,012 discloses a valve that is controlled dependent upon slippage of the lock-up clutch to control fluid flow rate. Macdonald Patent No. 4,969,543 discloses means for circuitous cooling oil flow path across the dynamic friction surfaces of a torque converter clutch.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Williams whose telephone number is 703-305-0607. The examiner can normally be reached on Mon. - Fri. from 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



EMW
October 17, 2002



RODNEY H. BONCK
PRIMARY EXAMINER
ART UNIT 3681